

AMENDEMENTS TO THE DRAWING

With this Response, Applicant provides a "Replacement Sheet" of Figure 7, as well as an "Annotated Sheet," of FIG. 7 illustrating the changes made thereto.

REMARKS

In the Office Action, claims 1-27 and 35-42 were rejected. By this Response, Applicant has amended claims 1, 2, 5, 7, 9, 10, 14, 18, 21, 25, 35-37, 39, 40, and 41, and cancelled claim 36 without prejudice. Upon entry of the amendments claims 1-27, 35 and 37-42 will remain pending in the present patent application. In view of the foregoing amendments and the following remarks, Applicant respectfully requests reconsideration and allowance of all pending claims.

Objections to the Drawings

In the Office Action, FIG. 7 of the present application was objected to. With this Response, Applicant submits a "Replacement Sheet" and an "Annotated Sheet" illustrating the amendments made to FIG. 7. In view of these amendments, Applicant respectfully requests the objections to the drawing be withdrawn.

Objections to the Specification

In the Office Action, the Abstract was objected to for including the terms "comprise" and "comprising." By this Response, as suggested by the Examiner, Applicant has replaced these objected to terms with "include" or "including," where appropriate. Additionally, Applicant has amended ¶ [0004] of the present application as suggested by the Examiner to correct for a typographical error. In view of these amendments, Applicant respectfully requests that the objections to the Specification be withdrawn.

Objections to the Claims

In the Office Action, claims 4, 10, 14, 18, 21, 36, 37, and 39 were objected to for various informalities. Respectfully, Applicant submits that the amendments to the above-listed claims presented herein overcome the Examiner's objections. In view of these amendments, Applicant respectfully requests the claim objections be withdrawn.

Rejections Under Section 112

In the Office Action, claims 5, 7, 9, and 35-42 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. First, it was asserted that the recitation “the first coiled wire” lacked antecedent basis. Claim 5 has been amended to correct this error and now recites “the first biasing member” to coincide with claim 1. Secondly, it was asserted that the recitation “the flexible tube” in claim 5 is unclear. Respectfully, Applicant directs the Examiner’s attention to paragraphs [0022] and [0023] of the present application for examples of the claimed flexible tube. Indeed, Applicant respectfully submits that any flexible tube that defines a fluid channel as claimed is sufficient to satisfy the claimed limitation, whether that is via a heat shrink material or otherwise. Thirdly, it was asserted that the recitation “each coil of the plurality of coils is displaced relative to the other coils in the plurality of coils” is unclear. Applicant, however, respectfully directs the Examiner’s attention to paragraph [0023] of the present application for examples of the present recitation. Specifically, this section notes that there are three separate springs that are each individually moveable with respect to one another. In other words, each coil is capable of independent movement, for instance.

In view of the foregoing, Applicant respectfully requests that the Examiner withdraw the Section 112 rejections of claims 5, 7, 9, and 35-42. Respectfully, reconsideration and allowance are requested.

Rejections Under Section 102

In the Office Action, claims 1-3, 18-21, and 35-39 were rejected under 35 U.S.C. § 102(b) as anticipated by “applicant’s admitted prior art,” (hereinafter “APA”) which the Examiner identifies as paragraph [0003] of the present application. Claims 1-3, 10, 11, 13-25, and 35-41 were also rejected under Section 102 as anticipated by the Keller et al. reference (U.S. Patent No. 4,145,595; hereinafter “Keller”). Additionally, claim 1 was rejected under Section 102 as anticipated by the Rehrig reference (U.S. Patent No. 5,403,987; hereinafter “Rehrig”), the Kleppen, Jr. reference (U.S. Patent No. 3,703,622;

hereinafter “Kleppen”), and the Delgado reference (U.S. Patent No. 6,855,905; hereinafter “Delgado”).

Applicant, however, respectfully submits the foregoing references do not anticipate the pending claims. Anticipation under Section 102 can be found only if a single reference shows exactly what is claimed. *See Titanium Metals Corp. v. Banner*, 227 U.S.P.Q. 773 (Fed. Cir.1985). For a prior art reference to anticipate under Section 102, every element of the claimed invention must be identically shown in a single reference. *See In re Bond*, 15 U.S.P.Q.2d 1566 (Fed. Cir.1990). That is, the prior art reference must show the *identical invention* “*in as complete detail as contained in the ... claim*” to support a *prima facie* case of anticipation. *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989) (emphasis added). Thus, for anticipation, the cited reference must not only disclose all of the recited features but must also disclose the *part-to-part relationships* between these features. *See Lindermann Maschinenfabrik GMBH v. American Hoist & Derrick*, 221 U.S.P.Q. 481, 486 (Fed. Cir.1984). Accordingly, Applicant needs only point to a single element or claimed relationship not found in the cited reference to demonstrate that the cited reference fails to anticipate the claimed subject matter. A *strict correspondence* between the claimed language and the cited reference must be established for a valid anticipation rejection.

Moreover, Applicant submits that, during patent examination, the pending claims must be given an interpretation that is *reasonable* and *consistent* with the specification. *See In re Prater*, 162 U.S.P.Q. 541, 550-51 (C.C.P.A. 1969; *In re Morris*, 44 U.S.P.Q.2d 1023, 1027-28 (Fed. Cir. 1997); see also M.P.E.P. § 2111 (describing the standards for claim interpretation during prosecution). Indeed, the *specification* is “the primary basis for construing the claims.” *See Phillips v. AWH Corp.*, No. 03-1269, -1286, at 13-16 (Fed. Cir. July 12, 2005) (citations omitted). It is usually dispositive. *See id.* Interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. *See In re Cortright*, 49 U.S.P.Q.2d 1464, 1468 (Fed. Cir. 1999); see also M.P.E.P. § 2111. That is, recitations of a claim must be read as they

would be interpreted by those of ordinary skill in the art. *See Rexnord Corp. v. Laliram Corp.*, 60 U.S.P.Q.2d 1851, 1854 (Fed. Cir. 2001); *see also* M.P.E.P. § 2111.01. In summary, an Examiner, during prosecution, must interpret a claim recitation as one of ordinary skill in the art would reasonably interpret the claim in view of the specification. *See In re American Academy of Science Tech Center*, 70 U.S.P.Q.2d 1827 (Fed. Cir. 2004).

With the foregoing legal precedent in mind, Applicant addresses the Section 102 rejections in turn below.

First Rejection Under Section 102

As discussed above, claims 1-3, 18-21, and 35-39 were rejected under Section 102 as anticipated by APA.

Applicant, however, respectfully disagrees. First, Applicant respectfully submits that the “Background of the Invention Section” of the present application is not admissible prior art. Long-standing precedent makes clear that “[i]t is necessary to consider *everything* appellants have said about what is prior art to determine the exact scope of their admission.” *See In re Nomiya, Kohisa, and Matsumura*, 184 U.S.P.Q. 607, 612 (C.C.P.A. 1975) (emphasis added). In fact, it is generally the case that such admissions must be clearly identified, through the explicit identification of what is “prior art,” for example. *See, e.g., Riverwood International Corp. v. R.A. Jones & Co.*, 66 U.S.P.Q.2d 1331, 1337 (Fed. Cir. 2003). In the present case, Applicant has expressly made clear that the “Background of the Invention Section” is “*not...admissions of prior art.*” *See* Application, ¶ [0001] (emphasis added). Thus, the Examiner cannot characterize the statements therein as “prior art” and employ them in a substantive rejection of the pending claims. In other words, this Background section is not acceptable statutory prior art, and Applicant has not affirmatively acted to allow this section to be viewed as admissible prior art.

Secondly, even if, *arguendo*, the Background section is viewed as prior art, it is still not anticipatory, because it does not disclose all of the claimed features of the pending claims. For example, beginning with independent claim 1, paragraph [0003] of the present application does not disclose a “*biasing member* operable to flexibly couple the cooling fluid supply tube to the torch head,” as recited. Rather, the alleged APA merely relates to the use of a coiled tube, and there is nothing in this alleged APA that suggests this coiled tube can be equated with the biasing member recited in the pending claims. Rather, only by speculation, can such a leap be made. And speculation is not sufficient for anticipation. *Cf. In re Robinson*, 49 U.S.P.Q. 2d 1949, 1950 (Fed. Cir. 1999) (noting that the cited reference in the case in question merely suggested a claimed feature). Moreover, there is no suggestion in the APA that any cooling fluid flow axially through the biasing member. Rather, the APA suggests that this flow would be circumferential. Thus, this alleged APA does not anticipate independent claim 1 and its respective dependent claims 2 and 3. Respectfully, reconsideration and allowance are requested.

With regard to independent 18, the alleged APA does not disclose first, second, and third legs respectively comprising *first, second, and third springs*, as recited. Again, the alleged APA merely discloses that a coiled tube is employed. This coiled tube, however, is not equivalent to a spring, just as a coiled garden hose is not equivalent to a spring. Thus, Applicant respectfully submits that the alleged APA does not anticipate independent claim 18 and its respective dependent claims 19-21. Respectfully, reconsideration and allowance are requested.

Turning to independent claim 35, this alleged APA does not disclose “a plurality of tubes operable to convey fluids” and “a plurality of coils...to enable the torch head to be angled relative to the plurality of tubes,” as recited. Rather, the alleged APA, again, merely disclose a coiled tube, and fails to give any disclosure related to a plurality of coils operable to convey fluid to the torch head, let alone any disclosure teaching or suggesting a relationship between the coils and any tubes. In other words, the coiled

tubes of the alleged APA cannot be anticipatory of both the coils and the tubes recited in the pending claims. Moreover, there is no suggestion in the APA that any cooling fluid flow axially through the biasing member. Rather, the APA suggests that this flow would be circumferential. As such, Applicant respectfully submits that the alleged APA does not anticipate independent claim 35 and its respective dependent claims 36-39. Respectfully, reconsideration and allowance are requested.

Second Rejection Under Section 102

As discussed above, claims 1-3, 10, 11, 13-25, and 35-41 were rejected under Section 102 as anticipated by Keller. Applicant, however, respectfully submits that Keller does not anticipate the pending claims, and addresses the rejected independent claims in turn below.

**Amended Independent Claims 1 and 10
and the Claims Depending Therefrom**

By way of example, Keller does not disclose a biasing member “such that the cooling fluid flows *axially through the first biasing member*,” as recited in amended independent claim 1, nor does it disclose a torch that “directs flow from a first tube *axially through a first coil* to the torch head,” as recited in independent claim 10. (Emphasis added.) By stark contrast, the device of Keller employs the helix 25 to route cooling fluid in a *circumferential path*. See Keller, col. 5, ll. 20-25. Keller states that “it is also feasible to make the helix of *tubular* rather than solid wire, this being necessary to supply a cooling liquid for the torch through the helix.” *Id.* (Emphasis added). If this is the case, Keller states that “one coil of the double helix [25] serves as the flow inlet and other as the flow outlet.” See *id.* Thus, in such an assembly, any cooling fluid would travel the entire *circumference* of each loop the helix is made of. Thus, cooling fluid in Keller is not passing *axially* through the helix 25, but *circumferentially* around it.

In fact, Applicant notes that in the “Background of the Invention Section” such circumferential routes are described as undesirable. See Application, ¶ [0004]. For

example, it is believed that “the flow of gas and/or cooling liquid through the coils may be affected by the head loss created by the route that the gas and/or cooling liquid takes in flowing through the coils.” *Id.* In addition, “manufacturing a welding implement with coiled tubing is time consuming and laborious. In view of the foregoing, it is clear that an assembly such as Keller’s is not anticipatory of but antithetical to the claimed subject matter.

Therefore, Applicant respectfully submits that Keller does not anticipate independent claims 1 and 10 and their respective dependent claims 2, 3, 11, and 13-17. With the foregoing in mind, Applicant respectfully requests reconsideration and allowance of claims 1-3, 10, 11, and 13-17.

Independent Claim 18 and the Claims Depending Therefrom

In regard to independent claim 18, Applicant respectfully submits that Keller does not disclose first, second, and third legs that respectively comprise first, second, *and third springs*, as recited. Rather, in Keller, the helix 25 is limited to, at most, a *double helix*. See Keller, col. 5, ll. 19-25. Thus, even if, *arguendo*, this double helix 25 is equated to two springs, Keller would still fail to disclose a *tripod support* structure comprising a first, second, *and third spring*, as recited.

Additionally, various dependent claims of claim 18 also recite features not found in Keller. For example, each of claims 19, 20, and 21 recites the routing of a fluid, whether gas or cooling fluid, *axially* through a spring. By contrast, in Keller’s helix 25, any fluid is routed through the hollowed coils and, thus, *circumferentially* through the helix 25, as discussed above. Furthermore, dependent claim 19 recites that “the first leg is adapted to *direct a gas axially* through the spring.” (Emphasis added). By contrast, in the device of Keller, gas is routed through the bore 29, and is capable of flowing to the torch head with or without the helix 25. As illustrated in FIG. 3 of Keller, the helix 25 is embedded in the molded torch handle, wholly outboard of the bore 29. See Keller, col. 4, ll. 59-65. Thus, the helix 25 of Keller in no way relates to the routing or directory of gas to the torch head, as this action is controlled wholly by the bore 29. Again, even without

the helix 25, gas would pass through from the welding cable and tube 26 to the torch head 10. Thus, Applicant respectfully submits that the helix 25 of Keller, even if a double helix, does not *direct* gas axially through the first spring, as recited.

Therefore, Applicant respectfully submits that Keller does not disclose all of the features recited in independent claim 18 and its respective dependent claims 19-25. Thus, Keller does not anticipate these claims. With the foregoing in mind, Applicant respectfully requests reconsideration and allowance of claims 18-25.

Amended Independent Claim 35 and the Claims Depending Therefrom

Also, Keller does not disclose “a plurality of coils...to route fluids *axially* through the coils” as recited in amended claim 35. (Emphasis added.) Rather, as discussed above, in the Keller assembly any cooling fluids are routed *circumferentially*—not axially—through the helix assembly 25. *See* Keller, col. 5, ll. 19-25.

Furthermore, Keller does not disclose all of the features recited in the dependent claims of claim 35. For example, Keller does not disclose a “deformable support member...configured to retain a user-determined position of the torch head,” as recited in amended dependent claim 41. Instead, Keller discloses a simple helix assembly 25 that, by its nature, is *elastic* and would not retain any selected position. Indeed, the helix 25 of Keller would return to its neutral state once the user-applied force had been removed, thus returning the torch head to the natural upright position. Moreover, there is no feature in Keller that is capable of resisting the elastic source of the helix to retain a shape. Thus, the Keller device cannot effectuate the recited limitation.

Therefore, Applicant respectfully submits that Keller does not disclose all of the features recited in independent claim 35 and its respective dependent claims 37-42, and respectfully submits that Keller does not anticipate these claims. With the foregoing in mind, Applicant respectfully requests reconsideration and allowance of claims 35 and 37-42.

Third Rejection Under Section 103

As discussed above, claim 1 was rejected under Section 102 as anticipated by Rehrig. Applicant, however, respectfully submits that Rehrig does not disclose all of the features recited in amended claim 1 and, thus, does not anticipate this claim.

For example, Rehrig does not disclose “a *cooling fluid return tube* operable to convey the cooling fluid *from the torch head*,” as recited in amended independent claim 1. (Emphasis added.) Instead, Rehrig discloses an assembly silent to the existence of a cooling fluid, let alone a cooling fluid return tube as recited. In Rehrig, the only fluid disclosed is the shielding gas flowing therethrough. *See* Rehrig, col. 5, col. 3, ll. 6-20. The purpose of this gas is to surround the weld location during operation. *See* Rehrig, col. 1, ll. 20-26. Thus, the gas in Rehrig is expelled from the torch body by apertures 26 and directed toward the weld location by nozzle 28. *See id.* at col. 4, ll. 17-26. At this point the gas is expelled into the environment—not returned. Thus, even if this gas of Rehrig were to be equated with a cooling fluid, in no way does Rehrig teach or suggest a *return tube* for this gas.

Accordingly, Applicant respectfully submits that Rehrig does not disclose all of the claimed subject matter of claim 1 and, thus, does not anticipate this claim. With the foregoing in mind, Applicant respectfully requests reconsideration and allowance of claim 1.

Fourth Rejection Under Section 102

As discussed above, independent claim 1 was rejected under Section 102 as anticipated by Kleppen. Applicant, however, respectfully submits that Kleppen does not disclose all of the features recited in amended claim 1 and, thus, does not anticipate this claim.

For example, Kleppen does not disclose “*a first biasing member operable to flexibly and fluidicly couple the cooling fluid supply tube to the torch head,*” as recited in amended independent claim 1. (Emphasis added.) Instead, in Kleppen, the member that provides a biasing force is the *elastomeric* sheath 44, which does not fluidicly couple any two members. In other words, the biasing member of Kleppen does not fluidicly couple any two members, because it is a solid structure. See Kleppen, col. 2, ll. 60-65; FIG. 1. Moreover, although element 30, which is coiled, does convey fluid, nothing in Kleppen suggests that it is capable of providing *a biasing force* and, thus, being a biasing member. Respectfully, Applicant submits that an interpretation otherwise would require speculation, which is not sufficient to support a *prima facie* case of obviousness.

Furthermore, Kleppen does not disclose a biasing member “such that the *cooling fluid flows axially* through the first biasing member,” as also recited in amended independent claim 1. Instead, the coils of element 30 carry the fluid in the kidney-bean shaped region best illustrated in FIG. 3 of Kleppen. And, as best illustrated by FIGS. 1 and 2 of Kleppen, this region is helically coiled, because element 30, which defines the region, is helically coiled. Thus, any cooling fluid in Kleppen flows *circumferentially* through each coil of element 30—and not *axially* as claimed.

Therefore, Applicant respectfully submits that Kleppen does not disclose all of the features recited in amended independent claim 1. As such, Kleppen does not anticipate this claim. With the foregoing in mind, Applicant respectfully requests reconsideration and allowance of claim 1.

Fifth Rejection Under Section 102

As discussed above, claim 1 was rejected under Section 102 as anticipated by Delgado. Applicant, however, respectfully submits that Delgado does not necessarily disclose all of the features recited in amended claim 1 and, thus, does not anticipate this claim.

For example, Delgado does not disclose a cooling fluid supply tube operable to convey a cooling fluid to the torch head...a *cooling fluid return tube* operable to convey the cooling fluid from the torch head...and a first biasing member operable to flexibly and fluidically couple the cooling fluid supply tube to the torch head,” as recited in amended claim 1. (Emphasis added.) In the Office Action, the gas from cylindered 26 has been equated with the claimed cooling fluid. *See* Office Action mailed July 27, 2005, p. 9. However, this gas of Delgado is not returned, but, instead, is expelled at the weld location into the environment. *See* Delgado, col. 1, ll. 20-25. Thus, if the Examiner’s interpretations are accepted, it cannot be said that Delgado discloses a cooling fluid return tube that would return this shielding gas from the torch head, as recited in claim 1.

Therefore, Applicant respectfully submits that Delgado does not disclose all of the features recited in amended independent claim 1. As such, Delgado does not anticipate this claim. With the foregoing in mind, Applicant respectfully requests reconsideration and allowance of claim 1.

Claim Rejection Under Section 103

In the Office Action, the Examiner rejected dependent claims 4-9 under Section 103 as obvious in view of Keller, APA, and Delgado, rejected dependent claim 12 under Section 103 as obvious in view of Keller and Rehrig, and rejected dependent claims 26, 27, and 42 under Section 103 as obvious in view of Keller and the Willgoths et al. reference (U.S. Patent No. 3,999,033; hereinafter “Willgoths”). Applicant, however, respectfully submits that the additional references and new applications of already addressed references do not obviate the deficiencies in regard to Keller, APA, Delgado, and Rehrig discussed above in relation to independent claims 1, 10, 18, and 35. Therefore, Applicant respectfully submits that dependent claims 4-9, 12, 26, 27, and 42 are patentable not only by virtue of the respective dependencies to allowable base claims but also by virtue of the additional features recited therein. In view of the foregoing, Applicant respectfully requests reconsideration and allowance of dependent claims 4-9, 12, 26, 27, and 42.

Conclusion

If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



Date November 28, 2005

Manish Vyas
Reg. No. 54,516
FLETCHER YODER
P.O. Box 692289
Houston, TX 77269-2289
(281) 970-4545

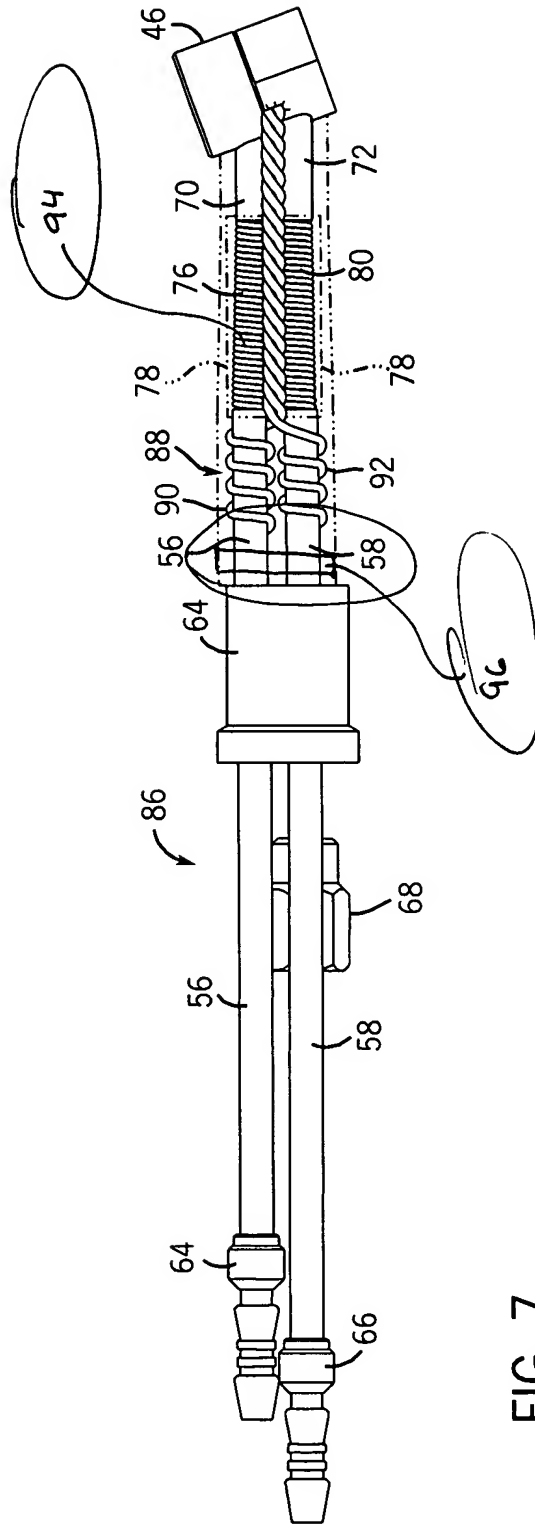


FIG. 7